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ABSTRACT

This theme issue of a Texas journal on gifted education focuses on future challenges and options. "A Thoughtful Look at the Concept of Talent Development" (Francoys Gagne) discusses definitions of giftedness and talent and describes a differentiated model of giftedness and talent that includes five aptitude domains: intellectual, creative, socioaffective, sensorimotor, and others. "There and Back Again: Searching the Past for Future Answers" (Michael W. Cannon) describes a middle school humanities-based program for gifted students. In "Open the Door to Multiple Intelligences," Carol Bedard recounts using Howard Gardner's Multiple Intelligences theory in her heterogeneous classroom. The article provides sample classroom activities for students with different intelligences. "Magnet Programs for Gifted Girls: A Parent's Perspective" (Ava Welge and Beth Fouse) describes a gifted girl's experience in a middle school magnet program. In "Home Schooling Gifted Children: The Ultimate Pullout Program," Brooke Randal discusses her experience in home-schooling and the resources she has used to teach. Articles include references. (CR)

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Tempo

TEXAS ASSOCIATION FOR THE GIFTED AND TALENTED
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VOLUME XVI ISSUE 4
FALL 1996

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TALENTS FOR THE 21ST CENTURY

Dear Colleague:

You are cordially invited to attend the Nineteenth Annual Professional Development Conference of the Texas Association for the Gifted and Talented, which will take place November 20-23, 1996, at the Austin Convention Center in Austin, Texas. *Talents for the 21st Century* is the theme for this year's conference.

Many of the sessions will focus on how we, as teachers, can identify and develop the talents of our students. The conference will offer participants numerous sessions on the five Core Areas and Teacher Competencies which were developed by a Texas panel of professionals and advocates in the field of gifted education including teachers, administrators, state and regional consultants, university faculty, and parents. These Core Areas and Teacher Competencies include Nature and Needs, Identification and Assessment, Social and Emotional Needs, Creativity and Instructional Strategies, and Differentiated Curriculum.

TAGT also wants to ensure that conference participants are able to receive the state-mandated training that is required of teachers by the State Board of Education and the Texas Education Agency. Specific sessions will address the five areas included in the state required training and TAGT's 45-hour Awareness Certificate.

Your participation is important to the growth of a strong organization advocating for gifted and talented programs. Only through your support of professional development, your encouragement of community involvement, and your attention to the current research in your field are we able to rededicate our effort to developing the *talents* of Texas' gifted and talented youth for the 21st century.

Sincerely,

Benny Hickerson

Benny Hickerson, Ph.D.
Chair, 1996 Conference Committee
TAGT First Vice President

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FROM THE PRESIDENT

Mary Seay

WHO'S AFRAID OF INDIVIDUALISM?

This century has not been very good about reading and following the script. From the rugged individualism of the 1700's and the 1800's, this century was not supposed to lead us to large scale corporations, businesses, bureaucracies, and organizations which created a centered homogeneous social system. A society where we all melt together, as Michael McGerr wrote, a smooth unfolding of organizational hegemony with fewer and fewer "individuals."

This century has tried to do that, but as it turns out, the United States remains notably heterogeneous; corporations have failed to recast their own workers, let alone the American culture. There is a pervasive sense of self, of personal worth, a yearning for individual autonomy, the persistence of individualistic ideals, and, maybe, a little self-absorption.

This country was born of, and its foundations still rest on, a faith in personal responsibility, risk-taking, entrepreneurship, personal decision making, and the notion that one owns one's own labor. Every breath we draw pulls air from an unbelievably diverse cultural heritage, and with McGerr, we can celebrate the fact that because of the strength of that diversity, we American individuals have been able to survive in the putatively hostile environment this century has tried to lead us into. The sanctity of the individual spirit is hanging on.

Let's open the door to a classroom. There are indeed 22 totally individual children, but listen closely:

"Every person is to open the book to page 51. Everyone will work the handout sheet which accompanies this page, you will all have the first 30 problems for homework, and everyone will work every problem the same identical way as everyone else." And that's only math.

Education seems to move farther and farther away from a quality, engaging, vigorous educational experience for each individual child by our misplaced dedication to the TAAS scores, standardized tests, and teacher training that teaches about books and not about children.

Is it consummate arrogance to persist in placement of two or more dozen children or young adults together in a room,

(See SEAY, pg. 4)

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Connie McLendon

TEXAS EDUCATION AGENCY STAFF AND TASK FORCE COMPLETE DRAFT OF STATE PLAN FOR THE EDUCATION OF GIFTED STUDENTS

In early March, staff from the Texas Education Agency, Office of Advanced Academic Services, began meeting with a task force of public school teachers and administrators to revise the *Texas State Plan for the Education of Gifted / Talented Students*, approved by the State Board of Education in 1990. Revisions which the task force are proposing to the 1990 plan will conform to gifted education requirements mandated by Senate Bill 1.

Section 29.123 of the Texas Education Code establishes *The Texas State Plan for the Education of Gifted / Talented Students* as the basis of program accountability for gifted education programs in Texas public schools. The draft of the proposed state plan is designed to be compatible with the Texas public school accountability system. Basically, the proposed plan follows the requirements set forth in either state law (Texas Education Code) or rule (State Board of Education) for five areas of program performance: Student Assessment, Program Design, Curriculum and Instruction, Professional Development, and Family-Community Involvement.

The proposed state plan will introduce three levels of program performance: "Acceptable," which reflects only those actions required by law or rule; "Recommended" and "Exemplary" for those districts or campuses choosing to provide more comprehensive services for gifted students. The plan will also offer guidance and examples of program performance for both "recognized" and "exemplary" levels. The second and third level options are not state mandated, but it is believed they will establish benchmarks of quality that a district or campus seeking excellence will choose to target. Similar to the three different options for high school graduation -"Minimum," "Recommended," or "The Distinguished Achievement Program," - the state plan for gifted education is designed so that each performance level builds on the level preceding it. For example, activities developed at the "recognized" level will build on those performed at the "acceptable" level; the "exemplary" level will build on performances designated for the "recognized" level.

Mary Seay, TAGT president, and Ann Wink, TAGT immediate past president, both serve on the state plan task force. Ann Brock, 1996 Texas State Teacher of the Year, and a former TAGT board member, also serves on the task force. According to Evelyn Hiatt, director of the Office of Advanced and Academic Services, the State Board of Education will discuss the proposed state plan at its meeting on Sept. 12-13. TEA will disseminate the draft plan submitted to the State Board at its Secondary Conference in Houston, Sept. 15-17.

The TAGT Executive Board will meet with Ms. Hiatt on Sept. 7 where the proposed plan will "debut" for a question and answer session. Ms. Hiatt and staff are also scheduled for a large Q & A session on the state plan at TAGT's annual professional development conference at the Austin Convention Center, Friday, Nov. 22. **The *Texas State Plan for the Education of Gifted/Talented Students* is scheduled for adoption by the SBOE on Nov. 7-8.**

FYI

TEA now places SBOE agenda items on its World Wide Web site, http://www.tea.state.tx.us. You may find agenda items by clicking through the following links: Administration > Commissioner and State Board of Education > Schedule for Board Meetings > November 1996. For assistance, email David Jacob via dja-cob@tenet.edu.

SBOE Adopts Credit-By-Exam Rules

In July, the State Board of Education approved credit-by-examination rules mandated by Senate Bill 1. The new rule requires districts to provide at least three days between June 1 and 30 and three days between July 1 and Dec. 31 to administer tests for students seeking credit-by-examination. Of special interest to the gifted education community is the provision which specifies guidelines to use in accelerating students at various grade levels. SB 1 requires ISDs to pay for the tests, giving rise to the "buzz" in Austin legislative circles that this particularly thorny section of requirements resulting from SB 1 is

certain to be revisited in the next legislative session. The significant cost of the program to school districts, some critics say, is nothing less than an unfunded mandate. Evelyn Hiatt is the TEA contact for Credit-By-Exam; she can be reached at 512/463-9455.

A Letter from the 1996 Teacher of the Year

Texas public education, and gifted education in particular, continue to reap benefits from our state's outstanding Teacher of the Year for 1996 - Ann Brock of the Burleson ISD. I am printing Ann's letter because it is one of those rare communications that is simply too good not to be shared. I invite you to experience the absolute delight Ann takes in being named Texas Teacher of the Year, share her enthusiasm for representing Texas and gifted education, and be thankful for teachers like Ann who take such pride in being teachers of gifted and talented children. Ann's letter and accompanying photographs are on pages 23-25.

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(SEAY, from pg. 2)

and to try to homogenize them by teaching them all from the same book, on the same time schedule, requiring the same output, giving them all the same input at the same time; in short, creating a pseudo-homogeneous, heterogeneous classroom environment? What in the world happened to appreciating children's differences? Where on earth did celebrating the individual go? We want them to be individuals when they get out of school, but we do little to foster their practicing that role; there are no "two-a-days" for individualism.

A dangerously wimpy dedication to a democratic and spellbinding education has been eroded further and further as state policy and local response has created a diminution of expectations of students. Not as obvious, but to me more insidious, is the state-driven thinking that there is no room in the curriculum for intellectually stimulating discussions of ideas, contrasting viewpoints, or alternative ways of looking at a process or notion. I guess that even if there were such things in the curriculum, there would be no time for them. A parent at our parent meeting last night told me that her gifted third grader got 34 worksheets as homework in the 14 days his class was preparing for the TAAS test. I think that some of these surely must not be germane to the education of a gifted individual.

Gifted children can't help being individuals, but their need for expressing themselves within the safety net of their mental peers is great, for gifted children are very sensitive to the jeers and taunts of age peers who cannot understand their responses, their view of the world, or the abstractions which fascinate them. The place where gifted children feel most secure is among the same kind of thinkers. In 1992, John Feldhusen and Sidney Moon wrote in the spring Gifted Child Quarterly:

> Gifted students have unique learning needs that are difficult, if not impossible, to meet in heterogeneous learning environments. They need instruction that is conceptually more complex and abstract than most learners can handle. Gifted students learn better in unstructured environments and benefit from indirect teaching methods... Sensible grouping practices match student needs with curricular opportunities. For gifted students, sensible grouping practices provide opportunities for interaction with other gifted students in educational environments that are specially designed to meet the unique learning needs of gifted learners (p. 63).

Gifted children must have a place where they are valued as individuals and the opportunity to express their individualism. They need a place with their mental peers that provides shelter, along with analytical, critical thinking, and complex activities.

It is painful to think of these children, languishing in the regular classroom where they are held back from advancing and learning all they can, missing the kind of enrichment they need. I read somewhere that it would be difficult to imagine that because a student was very good at basketball, he would be kept from playing because the others had not caught up with him. We could let him be a student-coach while the rest were catching on to the game. And, as Feldhusen and Moon (1992) wrote, it is also hard to imagine heterogeneous varsity football teams or a heterogeneous varsity band where beginning, intermediate, and virtuoso musicians marched and tried to perform together.

(See SEAY, pg. 12)

CORRECTION

In the Summer issue of *Tempo*, parents of gifted and talented middle school students in a San Antonio "area" school district were incorrectly identified in a headline as being from the San Antonio Independent School District. The editors regret any inconvenience this may have caused.

A Thoughtful Look at the Concept of Talent Development

François Gagné
University of Quebec at Montreal

Over the last few years, a growing number of specialists have adopted the expression "talent development" as a guiding principle or major goal for their work in gifted education. In the words of Renzulli and Reis: "Talent development is the 'business' of our field, and we must never lose sight of this goal, regardless of the direction that reform efforts may take" (1991, p. 34).

My first reaction to this expression (Gagné 1993) was rather positive, because, as I interpreted it, no other expression could better synthesize the dynamic dimension of my differentiated model of giftedness and talent (see Gagné 1985; 1993a). But I progressively realized that my interpretation was not shared by most of the other proponents of this expression, that there was in fact at least one other, very different interpretation.

Divergent Interpretations

These two interpretations of "talent development" have their origin in divergent definitions of the concept of talent, either as the *raw material* or as the *end product* of a developmental process. Defined as a starting point, the term "talent" designates natural abilities present with varying intensity in most boys and girls. When people say, for instance that, "This young person has talent, he/she will go far," they are frequently referring to the natural abilities that facilitate and accelerate learning in that particular domain. Here, "development" is the goal. But the word "talent" can also refer to systematically developed abilities which are characteristic of an expert in a given field of human activity; talent here becomes the end point of the developmental process. An academically talented youth is one who has mastered the notions, concepts and processes of major school subjects; a talented swimmer has mastered better than most, the very complex skills of swimming; and so forth. Here, the "talent" achieved is the goal, a major difference in perspective. The second interpretation fits perfectly well with my differentiated model of giftedness and talent, while the first one is antithetic to it. Let us first take a brief look at my model.

Gagné's Differentiated Model of Giftedness and Talent

In this model, the term *giftedness* designates the manifestation of natural abilities (called "aptitudes" or "gifts") in at least one ability domain to a degree that places subjects at least among the upper 15 percent of their age peers. The term *talent* designates the expression of systematically developed abilities or skills, and knowledge in at least one field of human activity to a degree that places subjects at least among the upper 15 percent of the same age active members of the field(s). [Note: The question of the prevalence of gifted and talented individuals in the population is not relevant to the subject of this article. I discuss elsewhere in depth (Gagné 1993a) the various problems associated with the choice of a particular threshold percentage. I explain my own choice of a threshold of 15 percent (approximately +1 SD) for *basic* giftedness or talent, and propose three other levels within the gifted and talented population: *moderately* (+2 SD), *highly* (+3 SD), and *extremely* (+4 SD). These definitions confirm that both gifts and talents have a common source in the concept of ability, but abilities of a different type or level of development.]

The model (Figure 1) currently proposes five aptitude domains: intellectual, creative, socioaffective, sensorimotor, and "others." These natural abilities, which have a clear genetic substratum, can be observed in every task we are confronted with in everyday life: the intellectual abilities needed to do a crossword puzzle or understand the workings of a new videotape, the creative abilities needed to solve a particular housekeeping problem, the physical abilities involved when doing home maintenance, or the social abilities which one uses in daily interactions with family and friends. Aptitudes or gifts can be observed more easily and directly in young children simply because environmental influences and systematic learning have exerted their moderating influence in a limited way only. But they show themselves even in adulthood through the facility and speed with which men and women acquire new abilities or skills in any given field of human activity; the easier and faster the learning process, the greater the natural abilities or aptitudes. It is these aptitudes which most lay persons (and many specialists in gifted education) call "talent" or "natural talent."

Talents, as defined in my model, emerge from the progressive transformation of these aptitudes into the systematically developed skills characteristic of a particular occupational field. These fields are

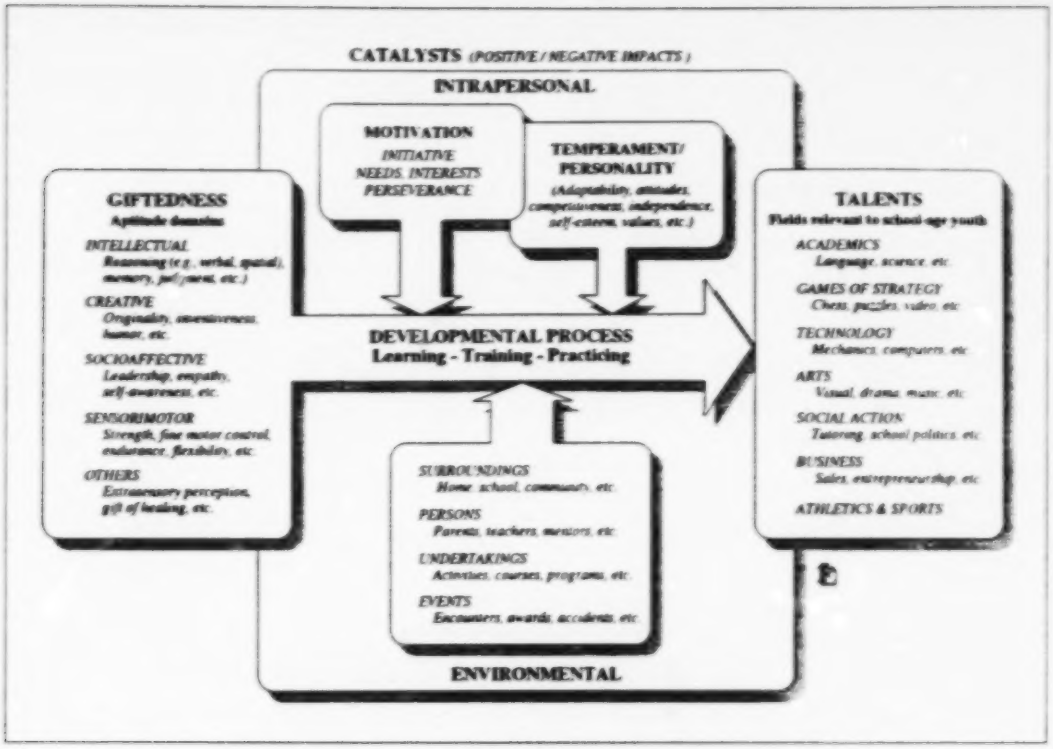

Figure 1
Gagné's differentiated model of giftedness and talent

as diverse as writing, science, computing, plumbing, drama, swimming, cooking, gardening, and hundreds of other areas. Figure 1 shows examples of fields of talent typical of school-age children and adolescents.

A given natural ability can express itself in many different ways, depending on the field of activity adopted by the individual. For instance, dexterity can be developed into the particular manual skills of a pianist, those of a sculptor, a surgeon, and so forth. Similarly, intelligence can be developed into the scientific reasoning of a chemist, the game analysis of a chess player, or the strategic planning of a quarterback. In my model, natural abilities or aptitudes act as the "raw material" or the constituent elements of talents.

It follows from this relationship that talent necessarily implies the presence of above average natural abilities. But the reverse is not true; it is possible for gifts or aptitudes *not* to transform themselves into talents, as witnessed by the well-known phenomenon of underachievement among intellectually gifted children. As shown in Figure 1, the transformation of aptitudes into full-fledged talents requires systematic learning, training, and practice, as well as the positive contribution (or the absence of negative contribution) from two types of catalysts: *intrapersonal* ones (motivation, attitudes, temperament, personality traits, etc.) and *environmental* ones (significant persons, events, geographic or social milieux, as well as planned undertakings).

It should now be clear why the first meaning (talent as starting point) of the expression "talent development" is totally unacceptable in the frame of my model, while the second one (talent as end point) is a perfect description of the dynamics of this model. Why is this last interpretation not shared by many scholars who advocate a more extensive use of this expression? I believe there are two major reasons: the ambiguity surrounding the concept of talent, and the political incorrectness of the concept of giftedness. Let us look at each of these explanations.

The Ambiguity Surrounding the Concept of Talent

When concepts lack a clear and agreed upon definition they become open to a plethora of individual viewpoints - such is unfortunately the case in the field of gifted education. This hopeless lack of

definitional consensus applies not only to the concept of talent, which is here debated, but to many others (e.g., giftedness, differentiation, enrichment, acceleration). Imagine what would happen in medicine if specialists decided to associate a different set of symptoms with a given label, or labeled differently the same set of symptoms! Yet this is exactly what is happening in our field.

Concerning the concept of talent, it shares at the outset all the ambiguities of the term giftedness. Why? Simply because most specialists consider this term to be a synonym of giftedness, as testified by that so common expression"the gifted and talented." A few additional meanings appear when both terms are distinguished. I have analyzed elsewhere (Gagné 1985) many of these attempts at differentiation; each one was sufficiently divergent from the others to preclude the extraction of any common viewpoint.

Is Everyone Talented?

Among the various meanings given to the concept of talent, one recurs frequently, namely that talent is present in everyone in some way or to some degree. For instance, Feldhusen (1992, p. 2) referred to the "process of identifying talent in all children" and noted: "[My] ... conception asserts that all or most children have some specific areas of talent strength or aptitude that should also be addressed" (1992, p. 33). Feldhusen's assertions directly contradict my definition of talent, which affirms its selective nature.

If we were talking about *competence* instead of talent, I would immediately agree that most children and adults become competent in many activity domains. But competence and talent are quite distinct concepts (see Sternberg and Kolligian 1990), even though they are closely related. In fact, the first half of my definition of talent would constitute a very good definition of competence, namely the demonstration of systematically developed skills in a particular occupation, beyond an agreed upon threshold. In the case of competence development, the threshold is defined in such a way that a large majority of those who attempt to learn these particular skills and/or knowledge succeed. By definition, *most* certified mechanics are competent, most teachers are competent, and so forth.

The concept of talent singles out a small percentage among competent persons as exemplary performers in their field. Talent is synonymous with expertise, excellence, outstanding performance; talent is to a minority what competence is to a majority. As defined in my model, talent is a *normative* concept; there are no absolute criteria for talent, only relative ones. Whatever the cutoff point chosen to delimit the gifted or talented zone, be it a more restrictive one (e.g., 3 to 5 percent) or a more liberal one (e.g., the 15 percent mentioned in my definitions), there is no reason to choose a different cutoff score for talent than for giftedness. In other words, the concept of talent is in my view no less selective than the concept of giftedness - both constructs single out the same approximate percentage of high achievers within the population (see Gagné, 1993a).

The Ipsative Viewpoint

There is one particular interpretation of a "talent for all" conception that is sometimes advanced, which corresponds to an *ipsative* viewpoint (Messick 1989). This viewpoint uses *within*-persons comparisons as opposed to the *between*-persons comparisons typical of a normative viewpoint. In the ipsative viewpoint, a particular child's ability profile is analyzed in order to identify his/her personal strengths and weaknesses, with the aim of building that child's competencies around his/her strengths.

While this goal is very worthwhile, labeling it talent development would significantly bias the basic meaning of the concept of talent, namely its normative meaning. In other words, the "personal strengths" of a child should not be called talents if they correspond to average or below average abilities (normatively speaking); they should be called competencies, and their development should be called "competence development." It is imperative, for the sake of terminological clarity, not to confuse these two frames of reference, and since the well-recognized basic meaning of talent is normative, it is the one we should use.

In Defense of the Giftedness Construct

My major objection to the talent development approach is that it has been linked with a rejection of the term "giftedness" and its replacement with the term "talent." As Feldhusen states clearly, "I do believe that the term 'gifted' is an albatross. I believe that we could live without it" (1994, p. 4). Similarly, Renzulli and Reis (1991) assert that "labeling students as 'the gifted' is counterproductive to the education efforts aimed at providing supplementary educational experiences" (p. 34).

Indeed, the justification of the talent development approach by these scholars looks more like an avoidance reaction to the giftedness construct than an approach reaction to the talent construct itself. Let us look more closely at some of their major arguments.

A Variety of Objections

Feldhusen maintains that "identifying and developing talent in all children frees us from the problems of identification of 'the gifted few' and possible underrepresentation of special populations as well as the stigmatizing effects of the gifted label" (1992, p. 1-2). This statement suggests two comments. First the "gifted few" are few only because too many professionals in the field either adopt an overly selective threshold or restrict the meaning of giftedness to a particular form of intellectual giftedness. Concerning the placement of the threshold, I believe that the adoption of a selection cutoff equivalent to the top 2 to 3 percent of the population is unduly restrictive (Gagné 1993a). For instance, Reis and Renzulli (1982) have clearly shown that many children with IQs lower than that threshold (130 or so) can perform as well in an enrichment program. Concerning the association of giftedness with intellectual abilities, I believe that this is a very restrictive definition of the concept of giftedness. In fact, as clearly emphasized in my definition, the giftedness concept encompasses at least four major aptitude domains, and many more subdomains.

As an example, experts in sports psychology (see Régnier, Salmela, and Russell 1993) describe "natural" physical abilities as gifts and aptitudes with a partially genetic origin; similarly, scholars in the psychology of music (see Shuter-Dyson 1982) describe many kinds of natural abilities as musical aptitudes or gifts, again recognizing their partially genetic origin. So it becomes easy to increase the prevalence of giftedness and talent without lowering the threshold, just by expanding the spectrum of abilities covered by these concepts.

Second, as regards to the "stigmatizing effects of the gifted label," Shore, Cornell, Robinson, and Ward (1991) summarized their review of the relevant literature as follows: "There is little support for the assertion of harm to the labeled child, resulting from either isolation or hostility. Families accord labeled children high status, teachers are more likely to respond to other characteristics, and labeled students report positive feelings" (p. 235-236).

Feldhusen also states that "there is no psychological, genetic, or neurological justification for a diagnostic category called 'gifted'," (1992, p. 3). I must again disagree and point out that over 100 years of research in psychology have shown that individual differences in abilities (cognitive, socioaffective, and physical) exist, and that research in population genetics (see Plomin 1989) has shown that these individual differences are substantially explained by differences in the genetic make-up.

How can there be no justification in singling out a subcategory of individuals who occupy the top end of any ability scale, in calling them gifted, and studying their differences from other more average individuals? Are we not doing exactly the same thing when we single out those called "mentally deficient," "physically attractive," "socially maladjusted," "talented in music," and so forth? Why question the existence of the "gifted" as a diagnostic category, but not those other similar categories?

Further on, Feldhusen affirms that giftedness is viewed as a "fixed, unitary trait manifested dichotomously. That is, some youth or people have it, most do not" (1992, p. 3-4). I agree with him that such a misconception - giftedness equated with general intelligence - is shared by a majority of educators, including too many specialists in gifted education. But instead of bowing to that general opinion and modifying their vocabulary, professionals in our field should meet this misconception head-on in their conferences, workshops, and writings. They should stress the more exact view of giftedness as a multifaceted construct.

As for the dichotomous categorization of individuals into "have and have not," it is by no means restricted to the giftedness construct, but tends to manifest itself in most discussions, whatever the subject. Anytime we create a concept delimiting a given subgroup within a population, the new "in-group" will immediately give birth to an "out-group" of those not possessing the defining characteristic(s) of the in-group.

Even if there is a whole continuum of intermediate cases not belonging clearly to either extreme, it is easier to think dichotomously. Because this dichotomization is so ingrained in general language and thought, there is every reason to believe that it would apply as well to the concept of talent; any screening process would undoubtedly separate the "talented few" from a majority of untalented individuals. In fact, Feldhusen appears to endorse such dichotomization when he writes, "In the process of identifying talent in all children, we should also become aware of those who have exceptionally high talent potential" (1992, p. 2). I see no difference between awareness of "those who have exceptionally high talent potential" and identification of "the gifted few." In my model, high talent *potential* is synonymous with "high aptitudes," "high natural abilities," or "giftedness."

Finally, Feldhusen contends that giftedness is a static concept. It is fixed. Talent and talent development are "dynamic concepts in which individual students and their special abilities can grow and develop with nurturance" (1992, p. 4). While I agree that in my model the concept of gifts is more static than that of talent, one referring to something in which genetic make-up makes it *in part* "passively received," and the other to something "actively acquired," the reality represented by the giftedness construct is itself partly static: genes are given by parents as part of the procreation process. That hereditary make-up cannot be changed and it creates limits or ceilings to the development of human abilities (see Plomin and McClearn 1993). So, the static quality of the construct should not give rise to a pejorative judgment in so far as it reflects quite adequately the phenomenon it represents.

But I would bet that if the concept of talent were to replace giftedness in everyday usage, and if it was used to compare those who have talent with those who don't, then the talent construct would soon acquire the perceived static quality of the giftedness concept. And this would be especially the case if the term "talent" referred to "natural talent" - the "raw material" or the "potential" which is molded and developed to produce systematically developed talents.

The Genetic Basis of Giftedness

Using somewhat different arguments, Renzulli and Reis (1991, p. 34, for all citations below) have adopted an attitude toward the giftedness concept which is very similar to Feldhusen's position. Their critique begins with the following statement: "The general approach to the study of gifted persons could easily lead the casual reader to believe that giftedness is an absolute condition that is magically bestowed upon a person in much the same way that nature endows us with blue eyes, red hair, or a dark complexion. This position is not supported by the research." If I understand this statement correctly, this "general approach" leads a casual reader towards a purely hereditarian conception of abilities. Indeed, such an extreme position is undefendable in the light of the most recent scientific knowledge on the genetics of human behavior. But, where is the problem - in the approach or in the reader? If such a conclusion stems from casual reading, then what can one do except advise readers to be more careful?

But a careful reading of Renzulli and Reis's text seems to indicate that the culprit is the approach, meaning that too many scholars in the field endorse that "unscientific" position. In fact, their text implies - it is not stated explicitly - that the opposite of a strong hereditarian position, namely a strong environmentalist one, is what science is endorsing. This can be deduced readily from their recommendation "that our field should shift its emphasis from a traditional concept of 'being gifted' (or not being gifted) to a concern about the *development of gifted behaviors* in those youngsters who have the highest potential for benefiting from special educational services."

It is also apparent in the "dynamic" and "relative" alternative they propose, namely that "varying degrees of gifted behaviors [can] be developed in certain people, at certain times, and under certain circumstances" and that "[giftedness] varies within persons and learning/performance situations." It leaves the impression that "gifted behaviors" are totally situational, that they have limited stability: a specific environment in time and space is *the* causal factor, more so than the individual. Yet Renzulli and Reis seem to contradict this position when they talk about "those youngsters who have the highest potential for benefiting ... " or affirm "not only will we be giving these high potential youngsters ... " and again further, "you don't develop the potential of a budding young concert pianist or composer by providing him or her with ordinary music classes for one or two hours a week."

What exactly is the "potential" Renzulli and Reis are talking about? Do they not recognize that there are individual differences in "potential," that some have more potential than others, and that these differences are enduring? And what causes the individual differences between those who have higher potential than others? Is it strictly the environment in which they were raised? If such is their belief, namely endorsing some form of radical environmentalism, then it is no more defensible than the other extreme they condemn.

The fact is, the most defensible position, from a scientific point of view, is a moderate one, in which both genetic and environmental components contribute fairly equally in explaining the observed individual differences in general intellectual ability, as well as other cognitive or non-cognitive abilities (Plomin and McClearn 1993). Non-casual readers of the scientific literature in population genetics are well aware of this position, and of its applicability not only to cognitive abilities but to personality characteristics as well (Neubauer and Neubauer 1990). In fact, the evidence is so overwhelming that Plomin, one of the foremost scholars in that field, concluded a recent overview of the evidence as follows: "The first message of behavioral genetic

research is that genetic influence on individual differences in behavioral development is usually significant and often substantial. Genetic influence is so ubiquitous and pervasive in behavior that a shift in emphasis is warranted: Ask not what is heritable, ask what is not heritable" (1989, p. 108).

When Renzulli and Reis state that "many people have been led to believe that certain individuals have been endowed with a golden chromosome that makes him or her 'a gifted person'," and judge such a view to be a serious "misuse of the giftedness concept," I would counter that such a belief is in no way at odds with current scientific knowledge, it is just overly simplified. Consequently, I do not hesitate to place myself among the many "non-casual" readers of the relevant literature who are convinced that genes play an active role in producing individual differences in terms of intellectual abilities, that indeed some persons are better endowed genetically than others, that there is nothing that one can do about this "injustice," and that this endowment is probably pleurogenic (more than one gene is involved) so the effect is not dichotomous, but produces a whole continuum of differences, in the same way that tallness and weight are not dichotomously distributed, even though both are highly heritable.

Recognizing the role of genes in human behavior is quite different from espousing an "absolute" or "static" view (either being gifted or not gifted). As we have seen above, a continuum of intensities or levels is totally congruent with situations of significant heritability, as long as more than one gene is involved, and the moderate position leaves ample room - within limits imposed by the genetic endowment - for environmental influences during the individual's development. It is not politically correct to recognize the existence of differential aptitudes anchored in the biological endowment, but modified to some degree by the environment in which children are raised. Strict egalitarianism must negate any form of injustice that is unrepairable, especially the basic unfairness of nature in the way it bestows "gifts" to individuals. Why can't we all accept the fact that this unfairness does not manifest itself only in the appearance of rare diseases, but affects all human characteristics: abilities, proclivities, temperament, etc.? Any parent who has at least two children is convinced of it! (We should keep in mind that the term "giftedness" was created centuries ago to express that common sense conviction shared by a large majority of people.)

In short, I believe that the giftedness construct is most useful in describing the natural abilities from which spring the talents that some youth will develop. I feel consequently very comfortable with the expression "education of the gifted," because it adequately translates one of the essential characteristics of our target population, namely their natural abilities in one or more domain, confirmed by the facility and speed with which they learn and progress in those particular ability domains.

Talent Development as a Goal

It is very unfortunate that the talent development approach is the by-product of an attempt to get rid of the concept of giftedness, the more so because it does not even lead to a clarification of its key concept. These are reasons enough for me to hesitate in endorsing the talent development approach *as currently presented*. Yet if the concept of talent was defined as the end product of a learning/training process, while giftedness would designate the raw material or "potential" which is transformed, refined, and perfected through this learning process, then the expression would coincide perfectly with my views on the major goal of our interventions with these youngsters who demonstrate above average aptitudes and/or precocious achievements in any field of talent.

What are these views? In a nutshell, a focus on talent development means that the identification process aims to point out not only youths who show superior natural abilities but who also manifest aptitudes for a particular occupational domain. Concerning those who have already chosen their field of talent, it means that the special curriculum aims at helping them develop these special skills to their fullest, particularly by being attentive to their more rapid rate of learning. Concerning those who have not yet identified a domain in which to apply their natural abilities, it means helping them explore the spectrum of human occupations while they concurrently examine more closely their interests, needs, and values.

Two other comments must be made. First, this choice of goal represents nothing else but the application to a special population of one of the major goals of general education: assuring that all children develop the competencies that will prepare them to become productive and well-adapted citizens. In other words, talent development is to gifted education what competence development is to general education.

Second, giving more emphasis to talent development should not mean that it becomes the only goal. There is ample room in a gifted child's schedule for the pursuit of other important parallel goals, such as

cultural enrichment or personal development.

My interest in the concept of talent development ensues from the fact that, among other things, it ties together a series of desirable changes I have in mind regarding the practices of educators in the field. Among them, I would like early screening to include the assessment of specific aptitudes and emerging talents outside the school curriculum. As an example, our research team has developed peer and teacher nomination forms which seek those who excel in a variety of domains: the scientist, the handyman, the programmer, the artist, the musician, the leader, the confidant, the salesperson, the gymnast, and so forth (Gagné, Bégin, and Talbot 1993).

Second, a focus on talent development should foster more frequent measurement of specific aptitudes, directly related to the talent being addressed: I am opposed to the omnipresence of IQ measures, especially when they have little relevance to the skills to be developed.

Third, a talent development frame of mind should induce educators to sensitize youngsters to potential fields of talent earlier and more intensively. It must be recognized that it is often through such exploratory activities that children discover their attraction to a particular field of talent. And interest is undoubtedly a powerful catalyst of talent, though too often given lip service in the planning of enrichment activities.

Fourth, a focus on talent development should generate more programs targeted at specific talent development, like special high schools for science, arts, music, athletics, and so forth.

Fifth, that focus should bring about a decrease in enrichment activities exclusively oriented toward the development of natural abilities. Enrichment, especially at the elementary level, too often amounts to just a few minutes a day of creative problem-solving exercises or other similar forms of mind-stretching activities. I do not mean that natural abilities should not be developed and trained; I mean that this should not be the major form of enrichment offered youngsters with exceptional abilities. Research has shown that such "pure" training, without any direct application to a practical field or subject matter, does not transfer well to other domains of knowledge (Glaser 1984). Stanley (1977) pointed out this problem by labeling the enrichment offered in too many classrooms as "busy work" or "irrelevant academic enrichment." He strongly promoted "relevant academic enrichment" and some "cultural" enrichment, coupled with appropriate accelerative enrichment. In my view, the SMPY program developed by Stanley and his colleagues at Johns Hopkins University is an excellent prototype of an enrichment program that puts into practice my conception of talent development.

Finally, we should bring together all educators concerned with talent development, whatever their field. Presently, the gifted education movement is almost exclusively composed of educators whose goal is to develop the *academic* talents of *intellectually* gifted children. Sometimes, other forms of talent development are even frowned upon as less valuable. How much more powerful would be a movement that would bring together all those who are dedicated to talent development, not only in academics but also in athletics and sports, technology, the arts, agriculture, and so forth. How much more enriching it would be for all concerned to compare their goals and practices. Then, the concepts of giftedness and talent would achieve their whole multifaceted meanings.

Conclusion

Beyond the discussion of the idea of talent development, this text has allowed me to address a subject of much concern, namely the terminological laxity which afflicts our field. While being a serious problem in itself, this laxity points to a more fundamental problem: the lack of conceptual agreement among specialists in the field regarding some of the most crucial concepts we are dealing with. I have in mind particularly the meaning of the concepts ability, aptitude, potential, and talent, as well as the origin of these abilities - what is commonly called the nature-nurture debate. I believe that our divergent viewpoints on this subject, as well as the fact that they are not explicitly stated often enough in the writings of scholars in the field, are among the major obstacles to the emergence of a common vocabulary and its associated meanings. Any effort at terminological consensus should first address the nature-nurture debate and present an explicit position on this question. From that position should follow clear proposals concerning the appropriate way to define the concepts of giftedness and talent. Such an agreement is essential if we want to progress conceptually, proceeding in new directions from a solid base of agreed-upon theoretical positions.

And we have no choice but to seek some agreement regarding these concepts, because both the key concepts of giftedness and talent are here to stay. Indeed, the terms "giftedness" and "gifted education" are both so anchored in popular language, as well as in the everyday language of professionals, that any

hope of substituting for them any other concept, even that of talent, is, in my view, utopic. I cannot imagine educators in our field changing the label from "gifted education" to "talented education!" Consequently, it becomes essential to define these concepts appropriately, and to make vigorous efforts to rally a large majority of professionals in the field around such definitions.

I hope that this call for a concerted effort towards the preparation of a conceptual and theoretical basis for our field will be heard by those who have the power to implement it.

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References

Feldhusen, J. F. (1994). No, it is more than terminology that needs changing: A rejoinder to Barbara Clark. *NAGC Communique, 1* (2): 4-5.

Feldhusen, J. F. (1992). *Talent Identification and Development in Education (TIDE)*. Sarasota, FL: Center for Creative Learning.

Gagné, F. (1993). *Why stress talent development?* Paper presented as part of the symposium "Talent from a theoretical perspective," within the program of the 10th World Conference on Gifted and Talented Children, Toronto, Canada.

Gagné, F. (1993a). Constructs and models pertaining to exceptional human abilities. International *Handbook of Research and Development of Giftedness and Talent*. K. A. Heller, F. J. Monks, and A. H. Passow, (Eds.), 63-85. Oxford: Pergamon Press.

Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly, 29:* 103-112.

Gagné, F., Bégin, J., & Talbot, L. (1993). How well do peers agree among themselves when nominating the gifted or talented? *Gifted Child Quarterly, 37*: 39-45.

Glaser, R. (1984). Education and thinking: The role of knowledge. *American Psychologist, 39:* 93-104.

Messick, S. (1989). Validity. In *Educational Measurement* (3rd ed.), 13-103. R. L. Linn (Ed.). New York: Macmillan.

Neubauer, P. B., and Neubauer, A. (1990). *Nature's thumbprint: The new genetics of personality*. Reading, MA: Addison-Wesley.

Plomin, R. (1989). Environment and genes: Determinants of behavior. *American Psychologist, 44:* 105-111.

Plomin, R., and McClearn, G. E. (Eds.) (1990). *Nature, nurture, and psychology*. Washington, DC: American Psychological Association.

Régnier, G., Salmela, J., & Russell, S. J. (1993). Talent detection and development in sport. In *Handbook of research on sport psychology*. R. N. Singer, M. Murphey, and L. K. Tennant (Eds.), 290-313. New York: Macmillan.

Reis, S. M., and Renzulli, J. S. (1982). A case for a broadened conception of giftedness. *Phi Delta Kappan*, 63: 619-620.

Renzulli, J. S., and Reis, S. M. (1991). The reform movement and the quiet crisis in gifted education. *Gifted Child Quarterly, 35*: 26-35.

Shore, B. M., D. G. Cornell, A. Robinson, and V. S. Ward. (1991). *Recommended practices in gifted education: A critical analysis*. New York: Teachers College Press.

Shuter-Dyson, R. (1982). Musical ability. In *The psychology of music*. D. Deutsh, (Ed.), 391-412. New York: Academic Press.

Stanley, J. C. (1977). Rationale of the Study of Mathematically Precocious Youth (SMPY) during its first five years of promoting educational acceleration. In *The gifted and creative: A fifty-year perspective*. J. C. Stanley, W. C. George, and C. H. Solano, (Eds.), 75-112. Baltimore, MD: Johns Hopkins University Press.

Sternberg, R. J., and Kolligian, J., (Eds.) (1990). *Competence considered*. New Haven, CT: Yale University Press.

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(SEAY, from pg. 4)

Our children deserve the least restrictive environment to develop their own individuality. As with Special Education students who need to take a step forward to achieve more and better learning, so do gifted students need to take the step forward from the regular classroom to their mental peer group. It is a core truth that the handicapped child and the gifted child need to be in an environment where they each benefit from their classmates. It is imperative that America cultivate our nation's resource of intellectual potential and gain a reservoir of intellectual talent. It is imperative that we write to our Congressmen, Senators and state legislators and exhort them to do so.

It is with a heavy heart that I sign my last column to you. I have never enjoyed so fulfilling a job as the representation of you and of the 285,000 gifted children in Texas. God speed.

References

Feldhusen, J.F., & Moon, S. M. (1992). Grouping gifted students: Issues and concerns. *Gifted Child Quarterly, 36* (2), 63-67

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TERREL BELL, FORMER U.S. SECRETARY OF EDUCATION, DIES

Terrel H. Bell, member of NAGC's National Advisory Board, died in June. He was the nation's education secretary during the Reagan Administration and oversaw the blue-ribbon panel that examined the state of public education in the United States. The result of the panel's work was the 1983 national report, *A Nation at Risk*. After leaving the Cabinet, Mr. Bell published the book, *How to Shape Up Our Nation's Schools*.

There and Back Again: Searching the Past for Future Answers

Michael W. Cannon
El Paso, TX

With the 21st century upon us, educators are often reminded to look to the future. We need to look ahead, not just to some general future of education or some particular program, but to the future of the students we teach. It is our job to prepare them not only to survive and prosper in the next century, but to contribute, to create, to make their world a place in which all may achieve a greater degree of humanity. In our computer-cluttered, web-site-studded milieu, it is important to remember that it is the study of the humanities - of those things that make us human - that makes any advanced society possible.

In far west Texas there is a humanities-based program that strives to prepare students for the future. The El Paso Independent School District's Humanities program was recently recognized by the National Association for Gifted Children in a report, *Gifted Programming Today: A National Sample,* as one of two exemplary gifted programs in the state of Texas (National Association for Gifted Children, 1995). It is an interactive, project-oriented curriculum built around universal themes, which integrates the study of literature, writing, history, and fine arts in a three-period block.

In 1988, a group of 12 teachers was given the task of creating a seventh grade humanities curriculum over the course of the summer. It was very successful. Middle-school grades 6 and 8 followed the next year. Teachers have continued to be involved in all stages of curriculum planning, review, and revision as other grade levels have been added. Four years ago, the G/T program in grades 4 and 5 was redesigned to follow the Humanities plan. Humanities is now offered at all 13 middle schools with approximately 900 students participating district-wide and another 400 fourth and fifth graders involved at elementary magnet sites.

In addition to an integrated/interdisciplinary approach to teaching history, literature, and writing, a strong thematic core that is developed during the middle-school program. In sixth grade, every novel is closely integrated with the study of world history; all the group and independent research activities reflect this integration. For example, in studying wars and revolutions, students read *The Wild Children*, research and report on different revolutions and evaluate their impact on people of the time. In seventh grade, historical novels are still used, but students are directed to focus on the events and characters of the story (such as *Johnny Tremain*) and then to look for similar situations in the events of Texas history. The thematic structure is brought more to the student's attention with other novels that share the same themes. In eighth grade, half the novels (including *April Morning* and *Gone With the Wind*) are integrated with the study of American history, but others *(Once and Future King, Murder on the Orient Express,* and stories by O. Henry) seek to expose students to a wider variety of genres while remaining focused on the general and specific themes. Some of these themes are establishing identity, coming of age, conflicting loyalties, and expanding horizons.

Initially, the fine arts were included only sporadically, chiefly in the form of student projects. Teachers soon realized the vital part played by the visual and performing arts in all eras of history studied, and a more systematic inclusion of fine arts was developed. In eighth grade, an art awareness program using color slides, "Art in America," was developed to make students aware of the growth of art in the United States and how it reflected American values as well as art movements in Europe and elsewhere (Cannon & Schwartz, 1992). Another art-based component, "Rembrandt and the Writing Process," was added, using extensive art print collections for each grade with detailed activities and writing prompts for individual prints as a way to make students look closely at art works while creating a focused written response. A series of discipline-based art lessons using large-sized prints that relate to the history, literature, and themes of each six-weeks period, has recently been developed.

Music also is an important strand in the program. While some traditional folk songs and other popular music were incorporated in the original Humanities program, more classical music, opera and ballet are now used (Cannon, 1992). For example, sixth graders learned about the Industrial Revolution using the opera *La Bohème* as a focus.

Opera, the music focus in the middle school, is introduced in grades 4 and 5 with ballets that interpret fairy tales. Grade 5 students also see a series of videos, *Who's Afraid of Opera?* (Kroll, 1972). The middle-school segment approaches opera in two ways. First, there is one opera for each grade level that relates to a historical period or event studied at

that level. In grade 7, students watch and discuss Puccini's *La Fanciulla del West (The Girl of the Golden West)* as they study the settlement of the West and read *Shane*. In eighth grade, they view *Madama Butterfly* and connect the story with the American opening of Japan and differing cultural values.

The second approach to opera was developed by Howard Will, formerly with The Great Books Foundation. His technique was to choose a musical work that was inspired by or related to a piece of literature. In our program, students read the myth of Orpheus then watch Monteverdi's *L'Orfeo*. After reading the Norse legend of Siegfried, they watch Wagner's opera of that name and compare interpretations. The fine arts segment has gone a long way in enabling students to have a more complete picture of the human experience.

An outgrowth of the Humanities program is the Cultural Arts Academy. This is a summer G/T program developed in collaboration with the El Paso ISD Fine Arts department and is open to any middle-school student enrolled in Humanities and/or a fine arts class. Students spend a month in the summer immersed in the Renaissance, learning art, music, and drama techniques of the period as they create original works and perform authentic pieces. A complete description of this program can be found in the Fall 1995 *Tempo* under the title, "Raiders of the Renaissance: Traveling Through Time to Develop Student Talents."

Just as the human condition continues to evolve and change, so does the Humanities program and there is always something new on the horizon. Future possibilities abound, but two ideas seem to hold the potential to increase the student's awareness and understanding of civilization and society.

First is the incorporation of a structured study of philosophy. In the sixth grade curriculum, certain philosophers are mentioned and students recreate Plato's *Symposium,* complete with food and drink, but an organized approach for other grades has been lacking. Logic, ethics, metaphysics, and political philosophy are all topics that can be fruitfully explored by able middle-school students.

Second, a close collaboration with the El Paso Museum of Art would enrich the fine arts component. The museum, with its Kress Collection of medieval, renaissance and baroque art, as well as an extensive collection of American artists and Mexican colonial art, could play an important role in a school-museum collaborative. Students would have the opportunity to study actual works of art in the museum and not have to rely on reproductions.

And so, in the end, what do we hope to accomplish with all this? What do we want our students to experience and learn? At the very least, they should understand where humanity has been, what has been created, and what possibilities are still to be explored. A foundation in the humanities will be a sure guide as the students begin their own journey there and back again.

References

Cannon, M. (1992). Til the fat lady sings: using opera as an organizer to build integrated units in history. *Prufrock Journal, 4*(2): 23-27.

Cannon, M. (1995). Raiders of the renaissance: traveling through time to develop student talents. *Tempo, 15*(4): 5-6.

Cannon, M., & Schwartz, K. (1992). Art in America: using art to teach history. *Tempo, 12*(3): 7.

Kroll, N. (Producer), & Kotcheff, T. (Director). (1972). *Who's Afraid of Opera?* (Film). Long Branch NJ: KULTUR International Films, LTD. National Association for Gifted Children (1995). Washington D. C., author

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CALL FOR BOOK AND PRODUCT REVIEWERS

Tempo receives and solicits new books and products on gifted education. We are currently looking for a group of qualified and interested individuals to become *Tempo* reviewers for these materials. We send reviewers the book or product and then they have about a month to read and review the material. The reviewer then writes a short review (300-700 words) and submits it to the *Tempo* editorial offices; the book or product is the reviewer's to keep. The review should describe the book or material, its appropriateness for gifted and talented learners, and point out any limitations or weaknesses.

Individuals interested in becoming book or product reviewers should send a cover letter and brief vita to the TAGT *Tempo* office; you may also call or write for more information. Send correspondence to: *Tempo*, Michael Sayler, Editor, P.O. Box 13857, University of North Texas, Denton, TX 76203-6857, 817/565-4699.

Open the Door to Multiple Intelligences

Carol Bedard
Horseshoe Bay, TX

"The pencil sharpener is broken again," panicked Sue. "Get Zachary," the class replied matter of factly. Everyone knew that Zachary fixed broken staplers, broken hole punchers, broken binders - broken anything. Zachary could even fix a clock with 20 moving parts, but he despaired when he had to write a five-sentence paragraph.

"And the winner for Best Actress is ... " I didn't have to say the name because the entire class yelled, "Eileen!" Eileen didn't just speak her lines; she lived them. Her entire body moved to emphasize a word. Her voice reflections haunted your inner soul, and her gestures heralded a gaggle of goose bumps. "I didn't get my Oscar invitation in yesterday's mail, Eileen," I often teased.

But I know someday I will. In fact, one day I will receive invitations not only to the Oscars, but to the Olympics, the Grammy Awards, a Nobel Prize ceremony, an Apollo 28 blast off, and many other award winning events. The invitations will come from the unique students that I have taught in heterogeneous classrooms: the gifted and talented, the emotionally disturbed, the on-grade level, and the learning disabled.

Last year, on the first day of school, I sat back and observed the pupils jockeying for their role in the classroom. I envisioned the end of the year autograph signing party. The gifted students would scribe, "The year was notable. Every group project was phenomenal." The learning disabled would scribble, "Best year ever. I didn't do anything all year. Sue did it all."

In a heterogeneous classroom, I have had several fears. One was that the gifted students would dominate the learning situation, do all the work and either reap the rewards of success or feel put upon by the teachers and the students. Equally troublesome was the fear that the on-grade level and special population students would assume a laissez-faire attitude toward the cooperative work done with the gifted students or develop feelings of inadequacy. I knew I would have to put Howard Gardner's Multiple Intelligences (MI) theory (Gardner, 1993) to work so that all my pupils could write at the autograph party, "My year surpassed my expectations. I learned so much about myself. My classmates and I are all capable."

Only with an understanding of their place in the world can children reach the enormous potential each of them holds. As Marge Kennedy wrote in the October 1994 issue of *Good Housekeeping* magazine, "All children are smart, and the job of teachers and parents is to help kids find the style of learning that lets their unique natural intelligence shine through" (p. 222).

Making students aware of the seven multiple intelligences offers them insight into their special abilities. Metacognitively, learning styles make sense to gifted students. Consequently, their learning potential heightens. Gardner's Multiple Intelligence theory identifies seven distinct intelligences: verbal/linguistic (word smart); logical/mathematical (logic smart); visual/spatial (picture smart); body/kinesthetic (body smart); musical/rhythmic (music smart); interpersonal (people smart); and intrapersonal (self-smart).

According to Gardner, the purpose of school should be to develop intelligences and to help people reach vocational and avocational goals that are appropriate to their particular spectrum of intelligences. People who are helped to do so feel more engaged and competent, and therefore more inclined to serve the society in a constructive way.

Utilizing the theory in the classroom requires rethinking and reorganizing activities, but it does not require curriculum changes. Beginning with the goal of incorporating the seven distinct intelligences into the novel units that the class would be studying, I collected, designed, and organized activities which enhanced the novel, *Sarah, Plain and Tall* (Figure 1). The students chose the activity they wanted to pursue without any knowledge of the seven multiple intelligences. After the activities were complete, a debriefing session was conducted: Who was happy with their project? Explain why you liked doing your project. Who would choose a similar type of project again? Who would change to a different type of project?

This discussion led to a mini-lesson on multiple intelligences. During the lesson, definitions and examples of each type of intelligence were given. The completed *Sarah, Plain and Tall* projects were categorized into the seven types of intelligences.

Intelligences	Sarah, Plain and Tall	Wizard of Oz
Interpersonal	• Plan a wedding celebration party to include refreshments, activities, or entertainment	• Direct group sessions • Settle group disputes • Cast actors • Select narrators • Direct rehearsals
Logical-Mathematical	• Present cause/effect chart of Sarah's problems • Collect and display a shell collection.	• Analyze plot, characters, and setting in original scene.
Intrapersonal	• Keep a daily journal of your activities and Sarah's activities - Reflect on them.	• Create characters using analysis from Logical-Mathematical
Visual-Spatial	• Draw pictures of Sarah and Papa • Design and make a quilt.	• Design set and costumes.
Verbal-Linguistic	• Rewrite the last chapter of the book. Be sure to create a new ending. • Read original scene. • Narrate play	• Write a script
Body-Kinesthetic	• Build a replica of the prairie barn. • Act out a scene from the book	• Build set.
Musical-Rhythmic	• Create a collection of prairie songs.	• Create songs for the play • Provide sound effects.

Figure 1.
Sample activities based on multiple intelligences for the novels *Sarah, Plain and Tall* and *Wizard of Oz*.

Over the next several days, as the students proceeded with their daily learning routine, they were asked to think about what activities they felt comfortable doing and to jot them down in their school notebook along with personal responses.

Students eagerly shared their responses: "I loved and hated at the same time listening to the story *Mick Harte Was Here*, because I remembered how sad I felt when my dog died;" "I loved the crossword puzzle we did in math because you had to figure out the answers by solving word problems;" and "I loved writing the advertisement for a new dad. I want my new dad to have short hair. He has to know how to fly kites."

Again, we discussed the seven multiple intelligences and categorized their responses. We ended this discussion by introducing an enrichment activity based on the *Wizard of Oz* (Figure 1) that was going to embellish their study of the novel. The students were asked to select a scene from the *Wizard of Oz* and analyze the plot, characters, and setting. Using the analysis, they identified modern day problems, settings, and characters that had similar characteristics. Then, they were to write and produce a modern day version of the scene. After the task was set forth, I displayed a multiple intelligence chart that outlined the activities that each "intelligence group" was to perform (Figure 1). Excitement ran wild.

"Zachary has to build the set," one student exclaimed. "Arlette is such a great artist. She has to design the costumes. Remember her mysterious lady costume?" Russell added excitedly. After much discussion, each student signed up for a group. Interestingly, the students did not try to pair up with their best friend. The class was subdivided into two groups of 11 each so two scenes could be performed. Over the next three weeks, the students were given one hour per day to work on the project.

On days that a group was not scheduled, the students in that group worked on other assignments. All students had a part in the play. Students acted, narrated, produced the sound effects, sang, and changed the scenery. The two rehearsal days were nothing short of chaos, but come Day 13, "The Show Must Go On!" was the battle cry, and it did. The plays were presented at the culminating *Wizard of Oz* unit study party. A scene from the book was read, and then the modern day version was performed. One group also presented their play at the end of the year parent meeting for gifted and talented students.

The novel units which incorporated the seven multiple intelligences met their goal of making students aware of their intellectual strengths. The activities provided an opportunity for students to

(See BEDARD, pg. 19)

Magnet Programs for Gifted Girls: A Parent's Perspective

Ava Welge and Beth Fouse
Longview, TX

An increasing number of studies have been conducted in recent years on at-risk gifted students. One such population is that of intellectually gifted girls. Studies have demonstrated that gifted girls and boys start out life in equal numbers and remain equal for about the first decade of life, but at middle or junior high school, the number of gifted girls participating in programs decline (Silverman, 1986). This time period has proven to be the most vulnerable for gifted girls (Bell, 1989; Buescher, 1991; Kerr, 1991). At that age, achievement scores, grades, and aspirations begin to drop, especially in math and science.

A recent study revealed an alarming loss in self-confidence and achievement as girls move from childhood to adolescence (AAUW Educational Foundation, 1992). Some argue that social pressure to conform in order to be accepted by the desired peer group causes this change in behavior (Silverman, 1993). Whatever the cause, this trend is alarming. Our country is losing a very needed resource: gifted girls who are able to contribute to society in significant ways.

The first author's daughter, Kirsten, identified as highly gifted in kindergarten, has been an exception to this trend of the "disappearing gifted girl." She has attended the Foster Middle School Magnet Program in Longview Independent School District since the sixth grade. Now in eighth grade, she is performing at a higher academic level than in elementary school (including math and science). She has developed very high academic and career goals, which will require a doctorate in one or more scientific domains. Her father and I credit her success to this superior magnet school program developed for academically gifted middle-school students.

Kirsten's emerging academic success and goal development evolved gradually. Although attending the Foster Middle School Magnet Program was very much her idea, she began sixth grade unsure of whether she could live up to the demands of the program. She was actually a little frightened. Her teachers were selected by the district for their excellence in teaching and their desire to work with gifted students and because they had extensive training in working with gifted students.

In order to be accepted into the Foster Middle School Magnet Program, which is really a school-within-a-school, students must meet eligibility requirements in four out of five areas. These criteria include minimum scores at the 90th percentile level on a group ability test and a nationally standardized achievement test, high scores on the Hawthorne Gifted Evaluation Scale and a creative writing sample produced by the student.

The program places an emphasis on acceleration (entering sixth grade students are placed in seventh grade textbooks), use of an integrated curriculum between the disciplines, and the development of critical thinking skills. Programs which enrich and enhance gifted students in the Foster Middle School Magnet Program include a creative problem-solving competition, a competitive math-science team, participation in the Region VII Education Service Center's Model United Nations Program, an SAT competition, a stock market competition, early foreign language and algebra instruction for high school credit, special field trips, and major research projects. Magnet program teachers are given a group planning period to design and implement these special activities in addition to a regular grading and conference period.

Kirsten's teachers worked very hard to make her adjustment to middle school a successful one. When it was discovered that she had a processing speed disability, these dedicated teachers allowed her to come before and after school to complete classwork and written tests. They also accepted papers typed on the word processor instead of handwritten homework. With the help of these specially-trained teachers, Kirsten's giftedness began to blossom.

With the encouragement of a couple of her sixth grade teachers, Kirsten entered a poem, " The Last Voyage of Arthur," in the school Dragon Faire, a medieval festival. She won first place in poetry, one of numerous competitions in the Dragon Faire. The college instructor judging the competition was extremely impressed with this poem and furnished written comments to Kirsten and her teachers on the maturity of her writing. This success spurred Kirsten to attempt additional endeavors. She joined the school's Math-Science Team, the only one offered

for middle-school students in Longview I.S.D. For a student whose strength was not in math, this was quite a leap of faith. When she brought home the first place trophy in science at her first area competition, she was hooked. She went on to win the State Science Competition in seventh grade along with numerous regional awards.

These successes might never have occurred in a regular middle school. The Foster Middle School Magnet Program encourages girls to compete with boys in math and science competitions. These students have more advanced assignments than peers on other campuses. Magnet school students burn the midnight oil and spend time in the library on evenings and weekends to create research papers, do interviews, and photograph landmarks in order to produce finished products normally considered above the level of most middle-school students.

Everyone is required to do this level of work, not just one or two gifted students in the classroom. Consequently, this demanding program has paid off for Kirsten with excellent grades and more proficient writing. According to her teachers, Kirsten can do library research and critical thinking better than most college students.

This grouping with other gifted students enabled Kirsten to thrive by forming close friendships with other gifted girls. Research shows gifted girls can weather the storm of the middle-school years with support of others like themselves who can share "common school experiences and similar interests of similar levels in dealing with the teasing and disapproval of the boys" (Casserly, 1979, p. 356). By grouping gifted students together in this magnet program, Kirsten, as well as other students, can socialize with and form close bonds with intellectual peers.

Perhaps the most exciting event has been Kirsten's participation in the Duke Talent Search Competition, in which high-performing seventh grade students from a 16-state region take either an SAT or ACT examination. When Kirsten qualified for the Grand National Ceremony at Duke University in Verbal and the State Ceremony in Math, we knew the Foster Middle School Magnet Program had been a major contributing factor in her achievements. Although Kirsten was the only Grand National recipient from Longview ISD, 10 of the 12 students receiving state recognition also came from the Foster Middle School Magnet Program.

Full appreciation for this magnet program was spotlighted when we attended a seminar for Grand National recipients and their parents. We heard outstanding speakers, including Stephanie Tolan, the renowned author and mother of a highly gifted son.

Ms. Tolan likened highly gifted students to "cheetahs in a land of lions." Like cheetahs with non-retractable claws and phenomenal speed in a land of less energetic lions, gifted students are different from their agemates. Tolan stressed the need to nurture and develop gifted children by carefully assisting them in planning for the future.

The uniqueness of Longview's program was evident when we visited with other highly gifted students' parents. Most of their children were not in special magnet school programs; instead, their gifted placements occurred in half-day pullout programs once a week, or in no programs at all. Some students' needs were supposed to be met in inclusive environments by regular classroom teachers with minimal training in working with gifted students.

The stories related by these parents were often nightmarish - severe underachievement, poor grades, worse study habits, teasing by non-gifted students (and sometimes even teachers), low self-esteem, and the tendency for masking of their giftedness to fit in with the crowd. As we shared our child's program, my husband and I began to appreciate how fortunate our daughter was to be grouped with 48 other gifted classmates. Kirsten does not think she is noticeably different from her classmates. She has not had to "dumb down" to be accepted by her peers. Instead, she has blossomed into a high achieving young woman with a positive self-esteem and high aspirations for the future.

We heartily thank our school district for the extra effort and foresight to develop a model program for gifted students. We hope this magnet program serves as a model for other school districts in Texas and the nation. Because of the availability of this program, Kirsten has taken the "path less traveled" and it is making all the difference.

References

American Association of University Women Educational Foundation (1992). *The AAUW Report: How schools shortchange girls.* Executive summary, Washington, D.C.: author.

Bell, L. A. (1989). Something's wrong here and it's not me: Challenging the dilemmas that block girls' success. *Journal for the Education of the Gifted, 12*:118-130.

Buescher, T. M. (1991). Gifted adolescents. In N. Colangelo & G. A. Davis (Eds.), *The handbook of gifted education* (pp. 342-401). Needham Heights, MA: Allyn and Bacon.

Casserly, P. L. (1979). Helping able young women take math and science seriously in school. In N. Colagelo & R. T. Zaffrann (Eds.), *New voices in counseling the gifted* (pp. 346-369). Debuque, IA: Kendall/Hunt.

Kerr, B. A. (1991). Educating gifted girls. In N. Colangelo & G. A. Davis (Eds.), *The handbook of gifted education* (pp. 342-401). Needham Heights, MA: Allyn and Bacon.

Silverman, L. K. (1986). What happens to the gifted girl? In C. J. Maker, (Ed.), *Critical Issues in gifted education Vol. 1: Defensible programs for the gifted* (pp. 43-89). Rockville, MD: Aspen.

Silverman, L. K. (1993). Social development, leadership, and gender issues. In Silverman (Ed.), *Counseling the gifted and talented* (pp. 291-328). Denver, CO: Love Publishing Company.

Welge, K. F. P. (1996). Be yourself. In *Of sunshine and daydreams*. Owing Mills, MD: National Library of Poetry.

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(BEDARD, from pg. 16)

showcase their unique talents. Because the students felt comfortable with their tasks and felt responsible for their part, high-level work was produced. Their appreciation for different types of talents skyrocketed. I found my gifted students risked the fear of failure and ventured out of their comfort zone to try different types of activities. The on-grade level and special population students gained self-confidence. One student noticed, "It's hard to believe that my best friend can't spell, but he sure can make up crazy songs and sounds!"

The world is a tossed salad. Teamwork and appreciation for diversity is demanded in the workplace. Used appropriately, Gardner's MI Theory can open a student's door to success.

References

Gardner, H. (1993). *Frames of Mind*. New York: Basic Books.

Kennedy, Marge (1994, October). Finding the smart part in every child. In *Good Housekeeping, 219* (4): 222.

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PUBLIC INPUT SOUGHT ON TEXAS ESSENTIAL KNOWLEDGE AND SKILLS

AUSTIN - Texas Commissioner of Education Mike Moses invites members of the public to review and comment on the draft of the proposed new state education curriculum. The Texas Essential Knowledge and Skills (TEKS), is being developed in response to legislation passed in May 1995 as part of Senate Bill 1. TEKS represents the first major change in curriculum standards since the essential elements were put in place in school year 1984-85. In March 1995, Mr. Moses appointed writing teams to develop TEKS. These teams, totaling nearly 400 teachers, parents, business representatives and community members, have worked for the past several months to develop basic understandings, knowledge and skills, and performance descriptions in each subject area. In developing TEKS, the teams received information from more than 25,000 Texans on the skills young people need in the world outside of school. TEKS content areas available for review are:

- agriculture
- science
- technology
- business education
- English language arts and reading
- fine arts
- health and physical education
- health science technology
- home economics education
- industrial technology
- languages other than English
- marketing education
- mathematics
- science
- social studies
- technology applications
- trade and industrial education.

Persons interested in reviewing the proposed TEKS should contact their regional education service center or local school district for further information. The review period ends Oct. 31, 1996. The State Board of Education will consider the proposed TEKS this fall, with final adoption expected in April 1997.

Home Schooling Gifted Children: The Ultimate Pullout Program

Brooke Randal
Austin, TX

Discussions of gifted education frequently tout the pros and cons of grade-skipping, enrichment, acceleration in the classroom, and other options. Another choice - home schooling - is rarely mentioned.

Home schooling has long been associated with fundamentalist Christian families. It is now a rapidly growing movement that encompasses families who choose this option for a variety of reasons, many of them academic. Estimates of home schooled children in the United States run as high as 1 million, according to H.O.P.E. For Texas, a non-profit organization which promotes home schooling. There are support groups for home schoolers in every state.

Texas has a particularly rich home school tradition because of our rural beginnings. In 1994, the Texas Supreme Court handed down a unanimous decision confirming parents' rights to home school their own children [Texas Education Agency et. al. vs. Leeper et. al. (No. D. 2022)]. The Court reviewed the history of home schooling in Texas, noting that at the beginning of this century "no more than 10 percent of school-age children attended public schools ... and as there were few private and parochial schools in the state, many children were taught at home." The Court emphasized that the compulsory attendance law of 1915 was never intended to restrict home schooling

For a gifted child, home schooling can offer particular advantages. There is no problem with identification; parents are usually very aware of their own child's talents and strengths. They are also very aware of their own child's interests, temperament, and style, and can easily customize an individual learning approach.

All of us learn more effectively when studying a topic we care about deeply. Children are naturally passionate about their interests. They learn much more avidly if allowed to pick up academic skills as a natural by-product of learning about whatever is important to them at the moment. It does not matter if the current interest is space, sports, dinosaurs, or horses. The child can use the interest as a vehicle for reading, 'riting, 'rithmatic, and - my candidate for a fourth R - research.

I personally spent four *years* helping a train-besotted preschooler research every book in our library system having anything to do with trains. Along the way, he learned to read (but only books about trains), and picked up a lot of science, history, and geography. He even picked up some math, building train-tracks and train-stations out of math manipulatives. There is no way he would have learned as much, and in such a natural way, if he had been with a teacher who had to address the interests of a room full of children. No matter how talented and dedicated the teacher is, she or he has to deal with 25 or 30 children, plus administrative demands. She or he cannot possibly do as much for each individual child as a parent can do. And the parent can do it in a small fraction of the time needed in a typical school day, because it is so individualized. The child never has to spend time waiting for slower learners to catch up, never has to practice skills which are already mastered, and never has to sit quietly and pretend to be attentive after completely tuning out the classroom.

My train enthusiast is now a mathematically gifted 9-year-old, whose latest passion is computers. We started off his math instruction with a "game-based curriculum." That means we spent many evenings playing card, dice, computer, and board games that required math. We had success more when the math was a natural part of the game, like Monopoly, than when the games had the obvious intention to teach. I got many good ideas for made-up games out of *Games for Math* (Kaye, 1988). We also used books of puzzles and brain-teasers from the library.

Although we do not use a formal curriculum, we have used *The Core Knowledge Series* (Hirsch, 1991). This is a series of six books entitled *What Your* (1st through 6th) *Grader Should Know*. Each book includes language arts, geography & civilization, fine arts, mathematics, and natural science. They are available in paperback at most large bookstores, and are completely self-contained. We take one with us when we go on long vacations. I write the math problems on individual Post-it Notes for my son to work however he likes. The rest of the book, I just casually read to him before bed and at odd times, like waiting in airports. It only takes about a month

to finish the book this way. It forces us both to learn about things that might not come up if we exclusively followed our interests. The series makes me feel confident that we are not leaving any huge gaps in his knowledge. I also tend to seek out library books and activities that supplement whatever we have been reading about in the series.

We have made several unsuccessful attempts at a structured approach to math. I picked out one math textbook published by Saxon Math which is very popular among homeschoolers. My first impression was positive; the books had clear, thorough explanations, and emphasized constant repetition and review. The company provided a placement test, and books that could be ordered with unit tests for administration at home. It was a high quality program. Unfortunately, my son *loathed* it! It was clear that he could do the work and was above grade level. But even when I let him do the tests first and skip the chapters if he did well, it was much too repetitive and tedious for him.

We are currently approaching math through multimedia. We still play games, especially on the computer. But we also have had good success with videos. Some of them we have recorded from our local public television station. In addition to *3-2-1 Contact*, there are several worthwhile math series broadcast in the middle of the night for schools to record and use during regular hours. Information can be obtained from the educational offices of local PBS stations.

We also have bought complete math courses on video. The Teaching Company (1/800/832-2412) has an excellent one called *Basic Math* which covers everything from advanced arithmetic through pre-algebra in 30 lessons. We simply watch them together, pausing the tape for my son to work the small number of sample problems. I help him or we rewind when he has questions. As long as he understands well enough to do the sample problems, we simply move on at a rate determined by his interest. He has not been pushed to work sets of problems.

Using this approach, Alex has been exposed to math topics I did not see until high school and college. This does not mean that he could be in a math class with 16 year olds or that he has complete mastery of everything he has seen. It does mean, however, that his interest in math is constantly fueled with new and challenging ideas.

Later, when Alex is developmentally ready, I expect him to work through the advanced math he has seen in a more formal way. He has been accepted into a program for mathematically gifted kids developed jointly by Stanford and Johns Hopkins universities. Kids take self-paced courses using a computer. They send their work directly into Stanford's computer using a modem, and communicate with a tutor by telephone and e-mail. Kindergarten through college level courses are available in math, as well as high school and college level physics and expository writing. Students receive a transcript and grades.[1]

Meanwhile, he has an appreciation of higher mathematics and an understanding of the interconnectedness of it that he might not have gained in a typical school program. He also has enough math background to pursue an interest in science that would not be accessible to him if he had only seen math up to a year or two beyond his grade level.

My son is becoming a very independent learner, and I spend much less hands-on time than I used to helping him learn. I view my role now as a facilitator. I drive the car on our frequent trips to the library, I make materials available, I pay for the computer software, I keep a look-out for new resources, and I encourage and make suggestions. He has group activities during after-school hours and he has neighborhood friends.

Our local home school support group has grown to over 200 families, and offers various clubs, social events, field trips and group activities. Alex is active in a home school chess club that meets regularly, and we organized a home school rocket club that meets sporadically. He has a weekly computer class during the school year, and camp in the summer. But my son himself has the final say on how he learns and how he spends his time.

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[1] For more information on this type of independent study, contact, Donnell Bilsky, Texas Education Agency, 1701 N. Congress, Austin, TX 78701, 512/463-9455 or e-mail: donnell@tenet.edu.

Education Program for Gifted Youth (EPGY); Ventura Hall, Stanford University, Stanford, CA 94305-4115. Phone: 415/329-9920, fax: 415/329-9924, or web: www.epgy.stanford.edu/epgy/epgy.html.

We can also be flexible about *when* we spend our time. I work half-days and half-nights. On days off, I tend to split the difference and sleep until noon. I also frequently work weekends and have time off when school is in session. Home schooling means that Alex can follow my schedule. We do some of our best work late at night after Dad is asleep. And we are able to schedule year-round family vacations.

Very little time is spent on activities that look like school. Sometimes Alex spends the entire day cultivating some computer-generated civilization. And he certainly has spent much less time than he needs to on perfecting spelling and handwriting. But overall, he is well ahead of his expected grade level, based on materials for particular grades which I have seen and used. And he has the satisfaction of being in control of his academic development.

My family is unique because every family is unique. But I do not believe that we have any unusual traits that make us uniquely qualified to home school successfully. Parents help their children learn to walk, talk, swim, ride a bike, and hit a fastball. Academic subjects are no different. The parents of gifted children frequently have significant talents of their own, which can be a big plus.

Home schooling is not the right choice for everyone. I have known successful home school families where both parents work, or Mom is single, or finances are limited, or parents never went to college. But the logistics are much more difficult under circumstances like these. Relationships between individual parents and children, especially during adolescence, also might make a parent a less effective teacher than a neutral outsider. If the parent feels overwhelmed or approaches home schooling with a severe sense of duty, or if the child thrives on the stimulation of a large group of other kids, home schooling also could be a poor choice. But for a family that wants to do it, home schooling can be extremely fun!

For me, helping my own child learn is much easier than trying to teach someone else's child. And it can be done alongside your usual routine so that it does not require a big sacrifice of the parents' time. The academic rewards for the child can be huge, but the biggest reward for my family has been the joy of having our son around, and the excitement of watching him learn. No one outside our family could possibly appreciate that as much as my husband and I do.

Support for home schooling is a significant industry encompassing countless publications, periodicals, and curriculum suppliers. It is possible to buy an entire "school year in a box" with lesson plans and materials for every day, or it is possible to be completely unstructured. For more information, check your local library and both religious and secular bookstores. Look for books by John Holt for an unstructured philosophy. *The Big Book of Home Learning, Vol. 1-4* by Mary Pride contains a wealth of information.

If you live in Austin, ask your local librarian to show you the resource booklet put together by Austin Area Homeschoolers. H.O.P.E. (Home Oriented Private Education) for Texas is a nonprofit organization which promotes home schooling. They publish a useful *Handbook for Texas Home Schoolers* listing both Christian and secular support groups and suppliers, along with advice on getting started. For a copy, send $15 to P.O. Box 59876, Dallas 75229 or call 214/358-2221.

References

Hope for Texas (1995). Handbook for Texas home schoolers, Austin: author.

Home School Legal Defense Association (1994). *Texas Education Agency et.al. vs. Leeper et. al.* Paeonian Springs, VA: author.

Kaye, Peggy (1988). *Games for math*. New York: Pantheon Books.

Core Knowledge Series (1991). New York: Delta Educational Publishing.

(Brook Randal, her husband David Schwendner, and their 9-year-old son Alex are starting their fourth year of home schooling. Alex has never attended a traditional school. Dr. Randal is an emergency physician at Brackenridge Hospital in Austin. Her husband is an electrical engineer specializing in software development.) T